WEST Search History

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DATE: Tuesday, May 10, 2005

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	DB=PC	SPB; PLUR=NO; OP=ADJ			
	L4	US-20040227128-A1.did.	1		
DB=USPT,EPAB,JPAB,DWPI,TDBD; PLUR=NO; OP=ADJ					
	L3	\$dioxy\$thiophene\$ with mesogen\$	2		
	L2	L1 same (liquid crystal\$ or mesogen\$)	37		
	L1	\$dioxythiophene\$	976.		

END OF SEARCH HISTORY

WEST Search History

Hide Items Restore Clear Cancel

DATE: Tuesday, May 10, 2005

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	DB=U	SPT,EPAB,JPAB,DWPI,TDBD; PLUR=NO; OP=ADJ	
	L2	jp-2003306531-\$.did. or ep-1182245-\$.did. or ep-1013413-\$.did. or us-5748271-\$.did. or	9

END OF SEARCH HISTORY

WEST Search History

Hide Items	Restore	Clear	Cancel

DATE: Tuesday, May 10, 2005

Hide?	<u>Set</u> <u>Name</u>	Query	<u>Hit</u> Count
	DB=U	SPT,EPAB,JPAB,DWPI,TDBD; PLUR=NO; OP=ADJ	
	L3	us-6852830-\$.did. or us-6852831-\$.did. or us-6756473-\$.did.	6
П	L2	11 and (mesogen\$ or liquid crystal\$)	0
******	L1	us-20030216540-\$.DID. or us-20020165338-\$.did. or de-19643031-\$.did. or us-5111327-\$.did. or us-20030139505-\$.did. or us-5300575-\$.did. or us-20030176628-\$.did. or us-4959430-\$.did.	12

END OF SEARCH HISTORY

=> d his

L2

(FILE 'HOME' ENTERED AT 20:34:28 ON 10 MAY 2005)

FILE 'CAPLUS' ENTERED AT 20:34:36 ON 10 MAY 2005

L1 2018 S ?DIOXYTHIOPHENE?

145985 S LIQUID CRYSTAL? OR MESOGEN?

L3 47 S L1 AND L2

```
2002:691027 CAPLUS
AN
     137:385168
DN
     Entered STN: 12 Sep 2002
ED
     Preparation, thermotropic liquid-crystalline and
ΤI
     fluorescent properties of semi-rigid homo- and copoly(ester-imide)s
     composed of 3,3'',4,4''-p-terphenyltetracarboxydiimide and
     3,3',4,4'-biphenyltetracarboxydiimide
     Sato, Moriyuki; Nakamoto, Yoshimi; Yonetake, Koichiro; Kido, Junji
ΑU
     Department of Material Science, Faculty of Science and Engineering,
CS
     Shimane University, Shimane, 690-8504, Japan
     Polymer Journal (Tokyo, Japan) (2002), 34(8), 601-607
SO
     CODEN: POLJB8; ISSN: 0032-3896
PΒ
     Society of Polymer Science, Japan
DT
     Journal
LΑ
     English
     35-5 (Chemistry of Synthetic High Polymers)
CC
     Section cross-reference(s): 73
     Semi-rigid homo- and copoly(ester-imide)s were prepared from bismethyl ester
AB
     of 3,3'',4,4''-p-terphenyltetracarboxydiimide and bisalcs. of
     3,3',4,4'-biphenyltetracarboxydiimide by melt polycondensation and their
     thermotropic liq.-cryst., photo- (PL) and
     electroluminescent (EL) properties were investigated. Differential
     scanning calorimetry (DSC) measurements, polarizing microscope
     observations of textures and powder X-Ray analyses suggested that
     homopolymer having hexamethylene chain form monotropic smectic C or A
     phase and most of copolymers form enantiotropic nematic phase. PL spectra
     showed that the polymers emit blue light in the chloroform solns. and in
     the films. EL spectra of polymers in double-layer devices
     (ITO/poly(3,4-ethylene dioxythiophene) (PE DOT)/polymer/LiF or
     Ca/Al), with blue emission, were almost identical to the PL spectra,
     although luminances were very low. The poly(ester-imide)s can be used as
     blue light-emitting and/or electron-transporting materials for organic EL
     devices.
     terphenyltetracarboxydiimide biphenyltetracarboxydiimide polyester
     polyimide synthesis thermotropic liq crystal; thermal
     property photoluminescence electroluminescence polyester polyimide light
     emitting device
     UV absorption
TT
        (UV-visible; preparation, thermotropic liq.-cryst. and
        fluorescent properties of poly(ester-imide)s)
     Polyimides, preparation
     RL: PRP (Properties); SPN (Synthetic preparation); TEM (Technical or
     engineered material use); PREP (Preparation); USES (Uses)
        (polyester-; preparation, thermotropic liq.-cryst. and
        fluorescent properties of poly(ester-imide)s)
IT
     Polyesters, preparation
     RL: PRP (Properties); SPN (Synthetic preparation); TEM (Technical or
     engineered material use); PREP (Preparation); USES (Uses)
        (polyimide-; preparation, thermotropic liq.-cryst. and
        fluorescent properties of poly(ester-imide)s)
IT
     Band gap
     Crystal structure
     Crystallization temperature
     Electroluminescent devices
     Emissivity
     Glass transition temperature
     Luminescence
     Luminescence, electroluminescence
     Melting point
     Phase transition temperature
     Solubility
        (preparation, thermotropic liq.-cryst. and fluorescent
        properties of poly(ester-imide)s)
IT
     Liquid crystals, polymeric
```

```
(thermotropic; preparation, thermotropic lig.-cryst. and
         fluorescent properties of poly(ester-imide)s)
IT
     67-56-1, Methanol, reactions
     RL: RCT (Reactant); RACT (Reactant or reagent)
         (esterification with terphenyltetracarboxylic
        dianhydride/aminoundecanoic acid reaction products)
IT
     106070-55-7
     RL: RCT (Reactant); RACT (Reactant or reagent)
         (in reaction with aminoundecanoic acid)
TT
     2432-99-7, 11-Aminoundecanoic acid
     RL: RCT (Reactant); RACT (Reactant or reagent)
         (in reaction with terphenyltetracarboxylic dianhydride)
IT
     475994-88-8P
     RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
     (Reactant or reagent)
         (monomer; prepn of, and in polymerization with bisalcs. of
        biphenyltetracarboxydiimide)
ΙT
                                       475994-91-3P
                                                       475994-92-4P
                                                                        475994-93-5P
     475994-89-9P 475994-90-2P
     RL: PRP (Properties); SPN (Synthetic preparation); TEM (Technical or
     engineered material use); PREP (Preparation); USES (Uses)
         (preparation, thermotropic liq.-cryst. and fluorescent
        properties of poly(ester-imide)s)
RE.CNT
        27
               THERE ARE 27 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE
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```

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ΑN
     2003:191562 CAPLUS
DN
     138:288067
ED
     Entered STN: 11 Mar 20.03
ΤI
     Liquid-crystal templating of conducting polymers
ΑU
     Hulvat, James F.; Stupp, Samuel I.
CS
     Department of Materials Science and Engineering Department of Chemistry
     Feinberg School of Medicine, Northwestern University, Evanston, IL,
     60208-3108, USA
SO
     Angewandte Chemie, International Edition (2003), 42(7), 778-781
     CODEN: ACIEF5; ISSN: 1433-7851
PB
     Wiley-VCH Verlag GmbH & Co. KGaA
     Journal
\mathtt{DT}
     English
LA
CC
     35-7 (Chemistry of Synthetic High Polymers)
     Section cross-reference(s): 36
     The formation of poly(3,4-ethylenedioxythiophene) films by
AB
     electropolymn. within the hydrophobic domain of a liq.
     cryst. template was studied. Liq. crystal
     gels were prepared by dissolving 3,4-ethylenedioxythiophene (EDOT)
     monomer and NEt4+ClO4- (supporting electrolyte) in poly(oxyethylene)n
     oleyl ether (n .apprx.10) LC phase. EDOT polymerization in LC gels was
conducted
     potentiostatically on Au- or ITO-coated glass substrates. After
polymerization,
     the LC gels were removed and the morphol. of the obtained PEDOT was examined
     polyethylenedioxythiophene electropolymn liq
     crystal polyoxyalkylene ether template; birefringence morphol
     polyethylenedioxythiophene electrochem polymd liq
     crystal template
TT
     Conducting polymers
        (formation of poly(3,4-ethylenedioxythiophene) films by
        electropolymn. within liq. cryst. template)
IT
     Birefringence
     Electric conductivity
       Liquid crystals
        (formation of poly(ethylenedioxythiophene) films by
        electropolymn. within liq. cryst. template gel)
IT
     Conducting polymers
        (polythiophenes; formation of poly(ethylenedioxythiophene)
        films by electropolymn. within liq. cryst. template
        gel)
IT
     Polymer morphology
        (surface; formation of poly(ethylenedioxythiophene) films by
        electropolymn. within liq. cryst. template gel)
TΤ
     126213-51-2P, Poly(3,4-ethylenedioxythiophene)
     RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
        (formation of poly(ethylenedioxythiophene) films by
        electropolymn. within liq. cryst. template gel)
IT
     9004-98-2, Poly(oxyethylene) oleyl ether
     RL: NUU (Other use, unclassified); USES (Uses)
        (lig. crystal; formation of poly(
        ethylenedioxythiophene) films by electropolymn. within
        liq. cryst. template gel)
RE.CNT
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